REMARKS

The foregoing amendments and these remarks are in response to the Final Office Action dated April 6, 2009. This amendment is accompanied by a Request for Continued Examination. Applicant hereby requests a three month extension of time for filing this response. Authorization is given to charge the appropriate fees to Deposit Account No. 50-0951.

At the time of the Office Action, claims 1-10 were pending. Claims 1-10 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. In particular, the application was alleged to lack support for the feature in claim 1 that the pressure of liquid ammonia is higher than that of synthesis gas. The compression of the flow of reactant gases is disclosed at paragraph [0035] as already noted in the Office Action. An appropriate amendment to overcome the rejection to claim 1 is made herein. Withdrawal of the 35 U.S.C. §112 rejection is therefore respectfully requested.

The compression is a consequence of feeding pressurized ammonia and the reactant gases in coaxial and co-current arrangement in the mixer (16), as disclosed in the claim. Moore et al. (WO 01/66465) is unable to create any compression of the synthesis gas, because the synthesis gas and the liquid ammonia are fed to a plate column (54). The energy pressure of the ammonia liquid stream is lost through the valve 55 and at the inlet of column 54. Moore has the disadvantage of a considerable pressure drop of the syngas, as commented in the application, paragraph [0010]. The pressure drop is caused by the valve 55 and by the structure and principle of operation itself of dehydrator 54. The presently claimed method and apparatus overcomes this drawback with a totally different approach, namely the exploitation of the pressure energy of the liquid ammonia in a coaxial mixer, where high-speed jets promote the washing of the gases and at the same time create a compression of the same gases (see paragraph [0035])

A person skilled in the art would not have replaced both the bubble cap tray dehydrator and the reduce valve 55 with the Venturi mixer of Bendix and Torkildsen. There is no incentive in the prior art to make such a replacement. Bendix and Torkildsen simply show that the Venturi tube was known.

A person skilled in the art would have not combined Moore with the Bendix and Torkildsen documents, the latter relating to the separation of acid gas from natural gas. There is no

incentive in the prior art to make such a combination. The synthesis of ammonia is a specific technical field and the related plants are quite complex. The result of any modification is not easily predictable. A person skilled in the art would have had no reason to look to a patent in a different and remote field.

In any case, even the combination of the two documents does not render the claims obvious. Bendix and Torkildsen disclose a jet pump for mixing natural gas with a suitable solvent or reagent for removing CO_2 and other acid gas components, and no hint can be seen towards the use of the jet pump to effectively wash ammonia make-up synthesis gas with a liquid ammonia, obtaining an efficient washing and at the same time a compression of said gas.

Applicant has made every effort to present claims which distinguish over the prior art, and it is thus believed that all claims are in condition for allowance. Nevertheless, Applicant invites the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. In view of the foregoing remarks, Applicants respectfully request reconsideration and prompt allowance of the pending claims.

Respectfully submitted,

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